

But troubles soon began to arise because some gentiles were reluctant to convert; some were even hostile about it. This attitude of reluctance and hostility is not surprising or unexplained, since many of the gentiles probably recognized by this time how their lifestyle would be changed by the missionaries. It is quite likely that the gentiles, as well as many neophytes, were averse to mission life mainly because of a love of liberty, a distaste for mission surroundings, a love for their native home, and a hatred against all forms of compulsion and restriction. The first reason for aversion, love of liberty, is perhaps the most understandable when one contrasts the freedom of the aboriginal lifestyle to mission life: restriction of diet, space, sex relations, physical activity, and social and intellectual expression. Because of this reluctance and hostility, the missionaries soon turned to the soldiers for support. In response, the military began to send out expeditions in search of fugitives. Many prisoners were taken and brought back to the missions; some of them were criminals but others were gentiles innocent of wrongdoing. As time passed, the hostility between gentiles and whites increased, until toward the end of the Mission Period all professions of voluntary conversion were abandoned. The purpose for expeditions to the interior was forced conversion and military subjugation. This forced relocation and conversion created in many of the Indians an animosity to mission life which was expressed through seditious, fugitivism, organized revolt, and abortion.

The Franciscan fathers and the Spanish in California did not set out to deliberately decimate the California Indian population. But neither did they try to understand the temperament of the Indian. They wished to convert the Indians both spiritually and culturally and, in so doing, they helped to destroy in entirety many aboriginal cultures, including that of the Chumash. The Spanish missionaries, soldiers, and civilians did not try to understand the Indian's temperament, nor did they realize that many would perhaps eventually choose death to life after being uprooted, enslaved, separated from their people, and deprived of their identity. It is known that diseases killed many thousands of Indians, but it is not known how many others killed themselves to die. How many Indians died because they no longer wished to live a life of captivity and suffering, both physical and mental? At the beginning of the Mission Period the Chumash population was probably between 8000 and 10,000. In 1832 it was reported that 2471 Chumash were living in the missions and working on neighboring ranchos (Cook, vol. 12, p. 40). It is impossible to determine how many Indians were unconvinced and unknown to the mission fathers, but it is unlikely that 1500 to 7000 Chumash could still be alive and free by 1832 and yet not be mentioned in any records of that time. One must therefore conclude that the remaining 7000 or so Chumash had perished (primarily as a result of contacts with the Spanish within the last fifty years) or vanished by 1832.

THE BASKETRY AND PLANK CANOES

CALIFORNIA



THE LIBRARY

LIBRARY OF



OF CALIFORNIA

LIBRARY OF



OF CALIFORNIA

CALIFORNIA



THE LIBRARY

CALIFORNIA



THE LIBRARY

LIBRARY OF



OF CALIFORNIA

LIBRARY OF



OF CALIFORNIA

CALIFORNIA



I. Basketry

The art of basketry, one of the oldest and most universally practiced handicrafts, effectively expresses a tribe's individuality and often conveys Indian history, art, poetry, and folk lore. The individuality is evident through an interpretation of basket designs. To interpret Indian symbols without the help of the individual weaver's thoughts is an exceedingly difficult task. But one can still realize that each tribe derives its own special meaning from a design that is perhaps totally different from another tribe's interpretation. The flash of lightning pattern may mean the incoming tide to Indians with homes near the sea, whereas it might represent a flowing stream to a tribe living in the mountains, or simply lightning in connection with rain to desert Indians.

Many California tribes exercised remarkable dexterity, energy, and ingenuity in their basketry, possibly because few other arts were developed. There is relatively little indication of metal vessels and they did little pottery work. Thus, by devoting a great deal of skillful time to basketry, the California Indians were able to excel in it, more so than any other American Indian tribe (Robert Heizer and M. A. Whipple, The California Indians, page 269). The craftsmanship of the Chumash Indians in basketry reflects this great pride of skill and resourcefulness. The weaving of their baskets was done entirely by the women, probably because of the steady patience required and which men often lack. The women spent a considerable part of their lives making the baskets, perhaps an average of several hours a day. The devotion of the Indian women is strikingly expressed by George Wharton James in the introduction to his book on Indian Basketry (page 3):

Among primitive arts, basketry furnishes the most striking illustration of the inventive genius, fertility of resource, and almost incredible patience of the Indian women. To them it is a work of love; a striving after the ideal; a reverent propitiation of supernatural powers, good or evil; a nation's art expression; a people's inner life of poetry, art and religion. Fine baskets to the older Indian women, were their poems, their paintings, their sculpture, their cathedrals, their music; and the civilized world is just learning the first lesson of the aboriginal melodies and harmonies in these wickerwork masterpieces.

For thus the tale was told
By a Penobscot woman,
As she sat weaving a basket,
A basket of abaznoda,
Of that sweet scented grass
Which Indians dearly love. (C. G. Leland)

When the early Spanish explorers came to this country, they showed great admiration for the Chumash basketry and felt that it was superior to that of the other Indians they had encountered in California. Consequently, they purchased many of these finely-decorated baskets to send back to their families and relatives in Spain, Peru, and Mexico. (Other travellers, such as the French, English, Russians, and Americans also bought many of the novel and handsome baskets at a later time.)



Baskets were the main utensils of the Chumash people, so nearly everything from the cradle to baskets for the grave was made of either coiled or twined basket-work. The following poem from "Little Jack of all Trades," printed in 1823, effectively conveys the fact that Indian baskets had many uses:

The Basket-Maker

From the osier by the brook
From the weeping willow's head,
Pliant, drooping boughs I took,
Of my spoils these baskets made,

Plaited, twin'd, and closely wove,
All their diff'rent uses try;
With their price my wants remove,
Gentle friends, my baskets buy.

Angler, this can hold thy fish,
Silk made flies, and baits, and hooks;
Pretty girl, this to thy wish,
Holds thy dinner, work and [books].

Mother, here can sleep thy babe,
Of its tender griefs beguil'd;
From cold winds and frost to save,
Buy a cradle for thy child.

(H. H. Bobart, Basketwork Through
The Ages, page 137)

The framework of the baby cradle (Plate I) was of green willow, since freshly cut branches were easier to work, and was covered by a tule (type of rush) mat.

On top of the tule mat was placed a piece of buckskin cut to the shape of the cradle. On this the baby was placed. In lining the cradle, rabbit and ardilla [Sp., squirrel--in this case probably the Southern California Ground Squirrel (*Spermophilus beechyi*)] skins as well as the beautiful soft skins of the flying squirrel were often used. [The flying squirrel has been referred to linguistically in the San Buenaventura dialect as tonton (Heizer 1952:56) or tõn-tõn (Heizer 1955), and is distinguished from the ground squirrel, pistok or pis-tuk.] On top of the baby was then placed another skin. [In securing the baby between the two pelts], a strip of buckskin one inch wide was zigzagged across the baby's body about six times. The bottom ends of [the buckskin straps] were supposed to lie one over the other, and come together on the baby's breast. A hood was attached to the top of the cradle with some string at a couple of places. [The hood, as mentioned above, was made of tule.]

The baby was carried in the cradle [much of the time] on the mother's back; the pita [Sp., plant fiber cord] passed from the

Baskets were the main utensils of the Chinaman people, an nearly everything from the cradle to baskets for the grave was made of either coiled or twined basket-work. The following poem from "Little Jack of all trades," printed in 1823, alliteratively conveys the fact that Indian baskets had many uses:

The Basket-Maker

From the center of the trunk
From the weeping willow's hand,
Plaint, dropping boughs I took,
Of my people's basket made.

Plaint, boughs, and leaves were
All their little work was;
With every basket we were
Glad to furnish our baskets by.

Angler, this was the fish,
This was the bait, and hook;
Pretty little, this is the fish,
Which my little, your and (hook).

Mother, here was a piece of fish,
Of the basket (which was)
From coils and leaves and grass,
Buy a cradle for the child.

(W. H. Hobart, Basketwork Through
The Ages, page 127)

The framework of the cradle (which I was of green willow, stands
heavily on branches were earlier to work, and was covered by a tape (type of
mesh) and

On top of the side was placed a piece of buckskin cut to
the shape of the cradle. On the left side was placed, in lining
the cradle, a small and small (the cradle) in this case
probably the Buckskin Cradle (which was) (Sperdyk's)
before, which as well as the Buckskin Cradle (which was) of the living
species, were often used. The Buckskin Cradle (which was) as mentioned
to be placed in the cradle (which was) and as distinguished from the
Buckskin Cradle (which was) (which was) on the side of the cradle was then
placed another side. The Buckskin Cradle (which was) the baby between the two sides,
a strip of buckskin was then was stretched across the baby's
back about six inches. The Buckskin Cradle (which was) and some together on the
were supposed to be one over the other, and some together on the
baby's breast. A head was attached to the top of the cradle with
two strips of a couple of inches. The head, as mentioned above,
was made of tule.

The baby was cradled in the cradle (much of the time) on the
mother's back; the baby (the baby) passed from the

ends of the uppermost slat of the cradle over the mother's epsu'u [which Harrington translates as basket hat].

The cradle could be hung from the roof of the hut by means of a long rope. Also, when the cradle was on the ground, the mother was able to sway it from side to side simply by pressing her foot across the cradle base. The cradle also would stand erect in a corner of the house, the sharpened ends being stuck in the ground for support. (Stephen Craig, Ethnographic Notes . . . , page 204).

A striking contrast for the use of baskets is found in this selection from a story about Indians:

They found his body and they stood beside it, crying for him; and the boy sang the wailing song for the dead. She had not taught him that song. He had that song in his heart, and he sang it The next day she dressed him in new leggings and a new shirt. They wrapped him in a blanket and a deerskin. She chose her best baskets and filled them with dried berries and smoked fish and cured meat. She made a drag out of a deerskin, looped long tongs to it, and on that skin drag they hauled him in the cave and set the baskets of food beside him, that he might eat on his long journey. (Hal Borland, When the Legends Die, page 38).

Coiled Baskets

The most numerous forms of baskets seem to have been made in the coil style. The coil baskets served for gathering, preparing, serving, and storing food, and for trinket vessels and hats. Large bucket-shaped burden baskets, some of these decorated, were hung on the front of a person while he was gathering seeds. After the seeds were collected, they were winnowed in a nearly flat coiled tray by shaking them about until the chaff came to the surface and was blown away. The seeds were then parched in a second coiled tray by tossing them with live coals in order to toast them.

Another essential food preparation utensil was the basket mortar or hopper. This coiled implement was open at the base and top and was cemented to the top of a flat rock with asphaltum. It was used for grinding acorns into meal. Bucket and basin-shaped baskets (Plate II) were used for meal preparation and a basket with a flat bottom and sharply flaring sides was generally used to serve the food (Lawrence Dawson and James Deetz, A Corpus of Chumash Basketry, page 201).

One of the most important of the coiled baskets was the large globular storage vessel, usually with designs. They were used mainly for storage of acorns but also were used to store much of the other winter food supplies such as seeds, fruits, roots, dried meat, and dried fish. This stored food was essential, because winter was a time of reduced food intake and often of hunger. During this period, the unavailability of plant foods in the natural environment and a minimum of other food sources such as fish, fowl,

ends of the uppermost side of the cradle over the mother's span, which Harrington translates as basket hat.

The cradle could be hung from the roof of the hut by means of a long rope. Also, when the cradle was on the ground, the mother was able to sway it from side to side simply by pressing her foot across the cradle base. The cradle also would stand erect in a corner of the house, the sharpened ends being stuck in the ground for support. (Stephen Craig, Ethnographic Notes... page 104).

A striking contrast for the use of baskets is found in this selection from a story about Indians:

They found his body and they stood beside it, crying for him; and the boy sang the wailing song for the dead. She had not taught him that song. He had that song in his heart, and he sang it. The next day she dressed him in new leggings and a new shirt. They wrapped him in a blanket and a deer skin. She chose her best baskets and filled them with dried berries and smoked fish and cured meat. She made a drag out of a deer skin, looped long ropes to it, and on that skin drag they hauled him in the cave and set the baskets of food beside him, that he might eat on his long journey. (Hal Borland, When the Legends Die, page 38).

Coiled Baskets

The most numerous forms of baskets seem to have been made in the coil style. The coil baskets served for gathering, preparing, serving, and storing food, and for crinkled vessels and hats. Large bucket-shaped baskets, some of these decorated, were hung on the front of a person while he was gathering seeds. After the seeds were collected, they were winnowed in a nearly flat coiled tray by shaking them about until the chaff came to the surface and was blown away. The seeds were then parched in a second coiled tray by tossing them with live coals in order to toast them.

Another essential food preparation utensil was the basket mortar or hopper. This coiled implement was open at the base and top and was cemented to the top of a flat rock with asphaltum. It was used for grinding acorns into meal. Bucket and basin-shaped baskets (Plate II) were used for meal preparation and a basket with a flat bottom and sharply flaring sides was generally used to serve the food (Lawrence Dawson and James Deetz, A Cornucopia of Chinook Basketry, page 101).

One of the most important of the coiled baskets was the large globular storage vessel, usually with designs. They were used mainly for storage of acorns but also were used to store much of the other winter food supplies such as seeds, fruits, roots, dried meat, and dried fish. This stored food was essential, because winter was a time of reduced food intake and often of hunger. During this period, the unavailability of plant foods in the natural environment and a minimum of other food sources such as fish, fowl,

or land mammals caused an intrinsic need for the stored supplies. The coiled globular trinket baskets were usually smaller in size and of the finest stitch with elaborate designs. The Indians kept thread (deer sinew), pieces of buckskin, hankerchiefs, and all types of small objects in them and often used them as gifts (Stephen Craig, The Basketry of the Ventureño Chumash, page 105). Women's basketry caps (Plate III) were coiled and had flat tops with conically flaring sides. They served mainly for cushioning the forehead against chafing by the pack strap of a burden basket, but were also used as a standard measure for seeds in barter.

Twined Baskets

Some of the twined implements were water bottles, seed beaters, leaching basins, and bailing baskets. Water bottles (Plate IV) were somewhat standardized in shape with small necks and flat bottoms. For waterproofing, these bottles were coated on the interior with asphaltum. The asphaltum was dropped into the basket and hot stones were then put in and rolled around. The hot stones melted the asphaltum and forced it into the cracks. Seed beaters (Plate V) were oval and shaped like a fan without a handle. These utensils were used for gathering seeds in order to knock them into a basket.

Wherever any seed bearing grass or plant grew in a sufficiently close stand, the seed beater could be employed to beat down or whip sidewise the ripe seed heads. They fell then into flattish or other baskets, and from these the accumulating load of seeds could be transferred into conical pack-baskets which the women had hung from around her forehead or chest by a strap. Even quite minute seeds were worth gathering when they could be beaten in, in this fashion, like a regular harvest; and if they were very small they were likely to compensate for this by special flavor or fragrance. In many cases, the gathered seeds were parched with a few coals to burn off their husks, after which most frequently they were ground, and could then be eaten either dry as a sort of seasoning or, when the quantity was sufficient, they would be treated very much like ground acorn meal. Chia or sage, various amaranths, tar-weed and other seeds from composite-flowered plants, and literally dozens of others were gathered in this way, each in its particular habitat which it favored, and at particular seasons. Even European weeds that were introduced in Mission times and that spread widely, like the wild oats, were utilized in this native fashion by the Indians. (Robert Heizer, Aboriginal California . . ., page 116).

The leaching basin was an additional and essential food preparation basket. Shelled and ground acorns were placed in the basin and water was repeatedly poured over this acorn flour until the poisonous tannic acid was removed. A fourth twined utensil, the bailing basket, was very small and shallow and was used to throw water out of the canoes.

Construction of a Basket

It is interesting to read about and look at pictures of beautiful craft-

or land mammals carried an intricate need for the stored supplies. The coiled glass-like baskets were usually smaller in size and of the finest with elaborate designs. The Indians kept threads (deer skin), pieces of buckskin, hankies, and all types of small objects in them and often used them as gifts. Stephen Cress, The Basketry of the Venturians (Berkeley, page 103). Women's baskets (white) were coiled and had flat tops with conically flaring sides. They served mainly for cushioning the forehead against chafing by the back strap of a burden basket, but were also used as a standard measure for seeds in barter.

Twined Baskets

Some of the twined implements were water bottles, seed baskets, leaching basins, and drying baskets. Water bottles (Plate IV) were somewhat standardized in shape with small necks and flat bottoms. For waterproofing, these bottles were coated on the interior with asphaltum. The asphaltum was dropped into the basket and hot stones were then put in and rolled around. The hot stones melted the asphaltum and forced it into the cracks. Seed baskets (Plate V) were oval and shaped like a fish without a handle. These vessels were used for gathering seeds in order to knock them into a basket.

Whenever any seed-bearing grass or plant grew in a sufficiently close stand, the seed basket would be employed to beat down or whip sideways the ripe seed heads. They fell then into flatish or other baskets, and from these the accumulating food of seeds could be transferred into conical pack-baskets which the women had hung from around her forehead or carried by a strap. Even quite minute seeds were worth gathering when they could be beaten in, in this fashion, like a regular harvest; and if they were very small they were likely to be compacted for later use by special flapping or tapping off. Hence, the gathered seeds were packed with a few coins to burn off their husks, after which they were thrown away. They were ground when he eaten either by a sort of kneading or, when the quantity was sufficient, they would be treated very much like ground acorn. Seed, this of sage, various quantities, and likewise dozens of others were from composite-flowered plants, and likewise dozens of others were gathered in this way, such as the particular habitat which is favored, and as particular seasons. Even European weeds that were introduced in Mission times and that spread widely, like the wild lettuce, were utilized in this native fashion by the Indians. (Robert Heizer, *Acquisition of California Indians*, page 116).

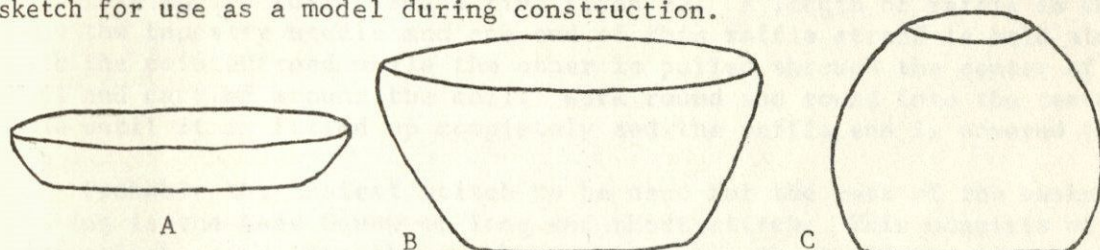
The leaching basin was an additional and essential food preparation basket. Shelled and ground acorns were placed in the basin and water was repeatedly poured over this acorn flour until the poisonous tannic acid was removed. A fourth twined utensil, the drying basket, was very small and shallow and was used to throw water out of the canoe.

Construction of a Basket

It is interesting to read about and look at pictures of beautiful craft-

THE LIBRARY OF THE UNIVERSITY OF CALIFORNIA

work, but this type of information is often more fascinating if one can become directly involved with it. One way to achieve this result from a student studying Chumash basketry is by allowing him to create a model of one of these vessels. Any of the mentioned baskets would be extremely interesting to weave, but the beginner should start with a relatively simple basket shape. The parching tray (Figure A) is not complicated to make, nor is the storage basket (Figures B and C). Yet they are very pretty vessels if care has been taken in their construction. Before the student begins^h weaving his basket, he should decide on the desired shape and then draw a sketch for use as a model during construction.

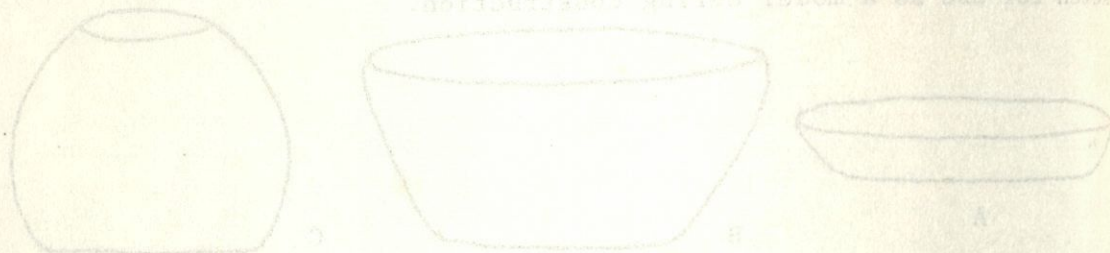


Among the materials used by the Chumash Indians for their basket weaving was "junco," a yellowish green rush or reed which grows in big bundles near the mouth of a river. After the reeds were cut, they were made white by carefully running them in and out of a layer of ashes and then laid out to dry (Thomas Blackburn, A Manuscript Account . . ., page 144). Cattail was another material that was sometimes used in the basket core (foundation). This plant grows in the sand at the mouth of rivers, often in the mountains. Willow shoots were also used, but rarely for anything besides the construction of baby cradles.

The materials required for weaving the student's basket are essentially the same as those employed by the Chumash women, but are somewhat more elementary (Refer to page 46). It is easier for a beginner to work with a large reed size, so number 5, 6, or 7 reed should be used. The reeds must be soaked thoroughly in warm water before being used, to make them pliable and to prevent their breaking and splitting. Soak the thicker reeds one half hour to an hour, but do not soak them so long that they become fibrous. After soaking the reeds, allow them to drain a few minutes before using. They should always be pliant enough to weave smoothly, so use a wet cloth or sponge to dampen each reed as it becomes dry during the working. For more flexibility, the lengths of the reed pieces should only be about three yards, since each reed can easily be joined. (It is not necessary to grip the reeds too firmly because this will cause cramped and tired fingers.)

Raffia is the native name given to a group of palms that flourish in Madagascar, Mauritius, and the neighboring islands and this name also refers to an inner cuticle of each palm. Raffia is a soft, flexible, and easily handled material, yet also very string, so it is used for stitching of the baskets. (For the wrapping of their baskets, the Indians used split reeds ("junco") or sumac splints. This material was split into strips of thin even width so that the stitches could be put in fairly evenly.) The raffia should also be soaked for a short period and then dampened frequently

with, but this type of information is often more fascinating if one can become directly involved with it. One way to achieve this result from a student studying Chumash basketry is by allowing him to create a model of one of these vessels. Any of the mentioned baskets would be extremely interesting to weave, but the beginner should start with a relatively simple basket shape. The parching tray (Figure A) is not complicated to make, nor is the storage basket (Figures B and C). Yet they are very pretty vessels. It has been taken in their construction. Before the student begins weaving his basket, he should decide on the desired shape and then draw a sketch for use as a model during construction.



Among the materials used by the Chumash Indians for their basket weaving was "junco," a yellowish green reed or weed which grows in big bundles near the mouth of a river. About the reeds were cut, they were made white by carefully turning them in and out of a layer of ashes and then laid out to dry (Thomas Blackburn, *A Manuscript Account*, page 144). (Gailail was another material that was sometimes used in the basket core (foundation). This plant grows in the sand at the mouth of rivers, often in the mountains. Willow shoots were also used, but rarely for anything besides the construction of baby cradles.

The materials required for weaving the student's basket are essentially the same as those employed by the Chumash women, but are somewhat more elementary (refer to page 44). It is easier for a beginner to work with a large reed six, so number 5, 6, or 7 reed should be used. The reeds must be soaked thoroughly in warm water before being used, to make them pliable and to prevent their breaking and splitting. Soak the thicker reeds one half hour to an hour, but do not soak them so long that they become fibrous. After soaking the reeds, allow them to drain a few minutes before using. They should always be pliable enough to weave smoothly, so use a wet cloth or sponge to dampen each reed as it becomes dry during the working. For more flexibility, the length of the reed pieces should only be about three yards, since each reed can easily be joined. (It is not necessary to grip the reeds too tightly because this will cause cramping and tired fingers.)

Kallia is the native name given to a group of palms that flourish in Madagascar, Australia, and the neighboring islands and this name also refers to an inner circle of each palm. Kallia is a soft, flexible, and easily handled material, yet also very strong, so it is used for stitching of the baskets. (For the wrapping of their baskets, the Indians used split reeds. This material was split into strands of this "junco" or similar splines. The material could be put in fairly evenly. The rattles even with so that the splines could be put in fairly evenly. The rattles should also be soaked for a short period and then dampened frequently

while being worked to prevent splitting. The weaving (using a tapestry needle) should be worked from left to right as held by the worker because this was the custom of the Chumash, but it is not a necessity. Take out the twist in the raffia as you sew, and try to keep the raffia stitches of one width as far as possible since this produces a much prettier basket.

To begin making the basket, shave the end of a length of reed to about a one and one-half inch point (Activity Frame I, page 7). Soak the pointed end for a few minutes in hot water if it is not pliable and then roll this end to form a small ring (step 2). A length of raffia is threaded into the tapestry needle and one end of this raffia strand is held along with the pointed reed while the other is pulled through the center of the coil and carried around the coil. Work round and round into the center hole until it is filled up completely and the raffia end is covered (step 4).

Probably the easiest stitch to be used for the rest of the basket weaving is the Lazy Squaw or long and short stitch. This consists of one long stitch going into the row beneath and one short stitch going around the foundation only (Activity Frame V, page 33). Pull the raffia firmly each time you go around the reed but not so tightly that you split it.

Make the flat coil base as large as is desired, and then begin shaping the basket. When outward sloping sides are wanted (Shape 1), place each succeeding row of reed a little farther out than the one before. To curve the basket sides inward (Shape 2), simply reverse the procedure and place the reed a little further in. If a straight sided basket is desired (Shape 3), hold each succeeding row of the reed foundation exactly over the previous row. This shaping can be accomplished by gently pulling the row of coil in the desired direction after three or four stitches have been taken through it and the previous row.

To join raffia, a new strand is caught in under the last few stitches of the previous strand. The new strand is then threaded into the needle and the short end of the old strand is placed alongside the reed. The weave is then continued with the new length. A new length of reed is added by splicing the two ends of the strands. This is done by shaving down the thickness of the old strand as well as the end of the new strand and lapping the two shaved sections together (Activity Frame VII).

The finishing off is very important in a coiled basket as it must be both secure and unobtrusive. Shave off the end of the reed to about one and one-half inches and cover the last row with a simple stitch over and over, sewing into the upper part of the coil beneath (step 7). Finish by working the raffia as unobtrusively as possible under and over alternate rows in the direction of the center coil and cut off the end inside. A simple and excellent way to preserve the finished basket is to rub linseed oil with a soft flat brush, being sure to work it into all the crevices, and then rub thoroughly with a brush or soft cloth.

while being worked to prevent splitting. The weaving (using a tapestry needle) should be worked from left to right as held by the worker because this was the custom of the Chinese, but it is not a necessity. Take one the twist in the raffia as you sew, and try to keep the raffia stitches of one width as far as possible since this produces a much prettier basket.

To begin making the basket, shave the end of a length of reed to about a one and one-half inch point (Activity Frame I, page 7). Soak the pointed end for a few minutes in hot water if it is not pliable and then roll this end to form a small cone (step 2). A length of raffia is threaded into the tapestry needle and the end of this raffia strand is held along with the pointed reed while the other is pulled through the center of the coil. Work round and round into the center until it is filled up completely and the raffia end is covered (step 4).

Probably the easiest stitch to be used for the rest of the basket weaving is the lazy spew or long and short stitch. This consists of one long stitch going into the row beneath and one short stitch going around the foundation only (Activity Frame V, page 23). Pull the raffia firmly each time you go around the row but not so tightly that you split it.

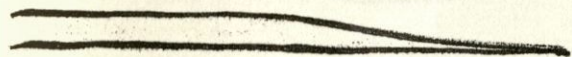
Make the first coil pass as large as is desired, and then begin shaping the basket. When outward shaping sides are wanted (Shape 1), place each succeeding row of reed a little farther out than the one before. To curve the basket sides inward (Shape 2), simply reverse the procedure and place the reed a little further in. If a straight sided basket is desired (Shape 3), hold each succeeding row of the reed foundation exactly over the previous row. This shaping can be accomplished by gently pulling the row of coil in the desired direction after three or four stitches have been taken through it and the previous row.

To join raffia, a new strand is caught in under the last few stitches of the previous strand. The new strand is then threaded into the needle and the short end of the old strand is placed alongside the reed. The weave is then continued with the new length. A new length of reed is added by splicing the two ends of the strands. This is done by shaving down the thickness of the old strand as well as the end of the new strand and joining the two shaved sections together (Activity Frame VII).

The finishing off is very important in a coiled basket as it must be both secure and unobtrusive. Shave off the end of the reed to about one and one-half inches and cover the rest row with a simple stitch over and over, weaving into the upper part of the coil beneath (step 7). Finish by working the raffia as unobtrusively as possible under and over alternate rows in the direction of the center coil and cut off the end inside. A simple and excellent way to preserve the finished basket is to rub linseed oil with a soft flat brush, being sure to work it into all the crevices, and then rub thoroughly with a brush or soft cloth.

WEAVING A BASKET

Activity Frame I

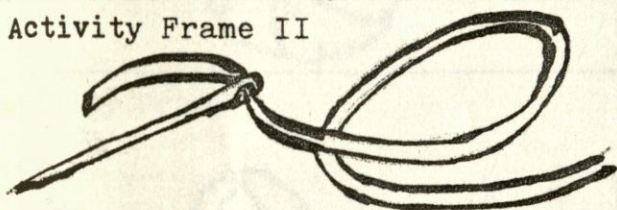


Soak the reeds for at least two hours and the raffia for one-half hour, before beginning.

Cut the reeds into lengths of about three yards each.

Shave the end of a length of reed to about a one and one-half inch point and then soak this end in warm water until it is pliable.

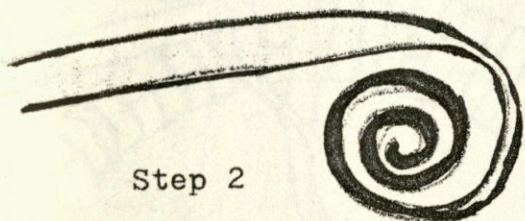
Activity Frame II



Step 1

Thread the tapestry needle with a length of raffia about five feet long (Step 1).

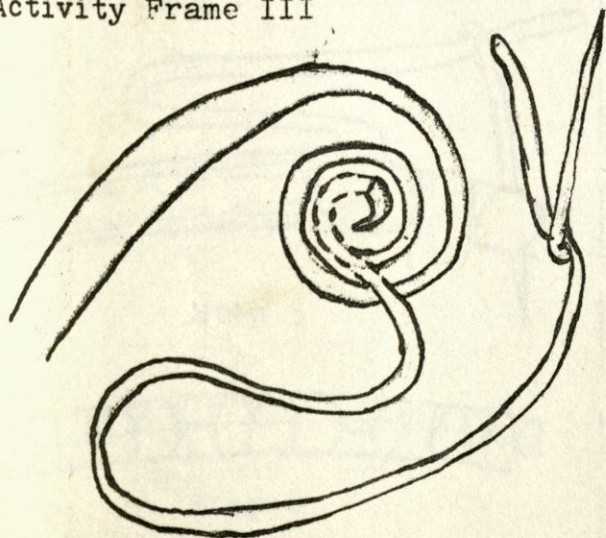
Roll the shaved end of reed to form a small ring (Step 2).



Step 2

Keep the reed and raffia damp during the weaving process by using a wet cloth or sponge. This will help prevent splitting.

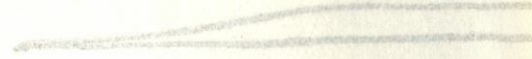
Activity Frame III



Place the long end of the raffia along the section of pointed reed, holding the needle with the short end of raffia in your hand.

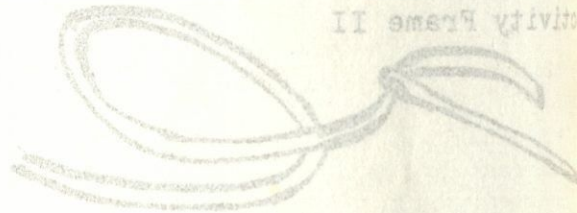
WEAVING A BASKET

Activity Frame I



Soak the reeds for at least two hours and the raffia for one-half hour, before beginning.
Cut the reeds into lengths of about three yards each.
Shave the end of a length of reed to about a one and one-half inch point and then soak this end in warm water until it is pliable.

Activity Frame II

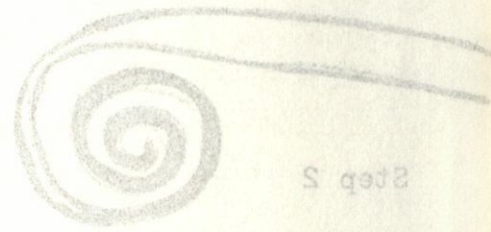


Step 1

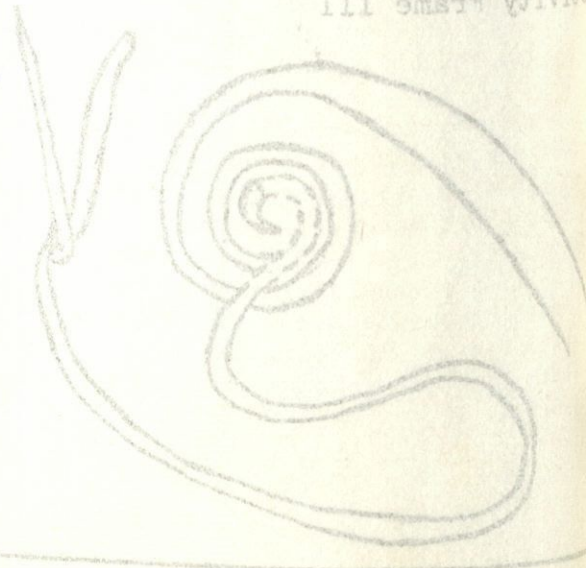
Thread the tapestry needle with a length of raffia about five feet long (Step 1).
Roll the shaved end of reed to form a small ring (Step 2).

Keep the reed and raffia damp during the weaving process by using a wet cloth or sponge. This will help prevent splitting.

Step 2

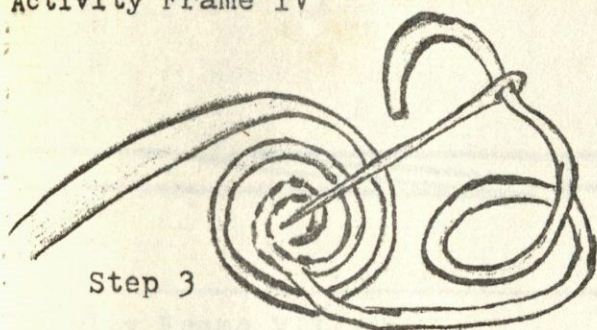


Activity Frame III

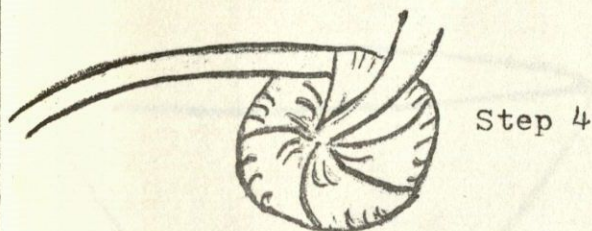


Place the long end of the raffia along the section of pointed reed, holding the needle with the short end of raffia in your hand.

Activity Frame IV

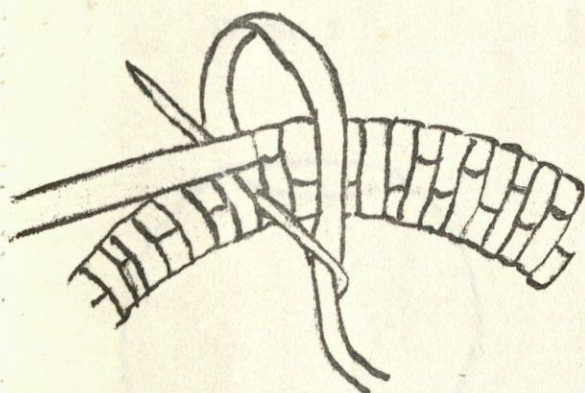


Using the needle to go through the center of the coil (Step 3), begin wrapping the length of raffia round and round into the center hole.



Fill the center hole completely by continuously wrapping the coil of reed with the raffia (Step 4).

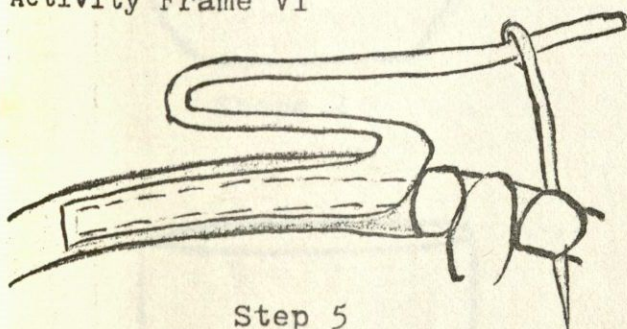
Activity Frame V



After the center coil has been completely covered, begin using the Lazy Squaw or long and short stitch to weave the rest of the basket.

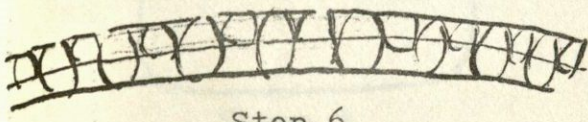
This stitch consists of one long stitch going into the previous row (thus surrounding two reeds) and one short stitch going around the top reed only.

Activity Frame VI



To add a new length of raffia: Leave about two inches of the old raffia length. Thread a new length into the needle.

Lay the end of the old piece of raffia along the section of reed about to be stitched. Then place the very end of the long section of the new raffia piece on top of the old raffia end (Step 5).



Begin stitching around the reed again and the old and new ends of raffia will soon be covered (Step 6).

Activity Frame VII

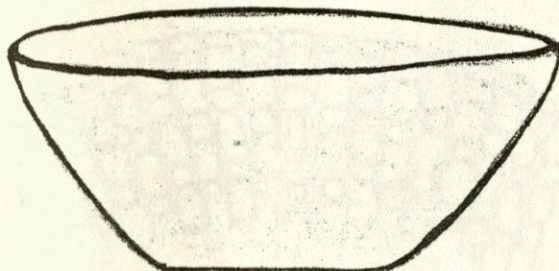


To add a new length of reed:

Shave the end of the old strand and the end of the new strand to a point.

Place these points together and continue stitching as though they were one single reed length.

Activity Frame VIII

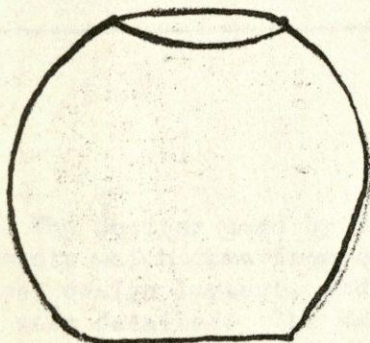


Shape 1

Make the flat coil base as large as is desired and then begin shaping the basket.

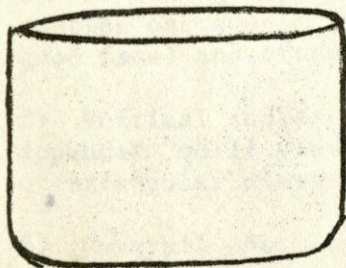
The shaping can be accomplished by gently pulling the row of reed in the desired direction after 3 or 4 stitches have been taken through the previous row.

For outward sloping sides, place each succeeding row of reed a little farther out (Shape 1).



Shape 2

To curve basket sides inward, place each succeeding row of reed farther in (Shape 2).



Shape 3

For a straight-sided basket, hold each succeeding row of reed exactly over the previous row (Shape 3).

To add a new length of reed;
Shave the end of the old strand
and the end of the new strand
to a point.
Place these points together and
continue stitching as though
they were one single reed length.

Make the first coil base as large as
is desired and then begin shaping
the basket.
The shaping can be accomplished by
gently pulling the row of reed
in the desired direction after
3 or 4 stitches have been taken
through the previous row.

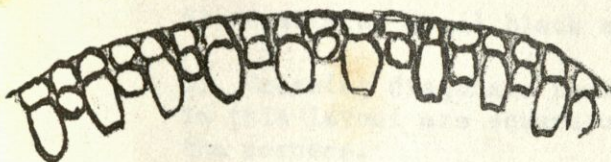
For outward sloping sides, place each
succeeding row of reed a little
farther out (Shape 1).

To curve basket sides inward, place
each succeeding row of reed
farther in (Shape 2).

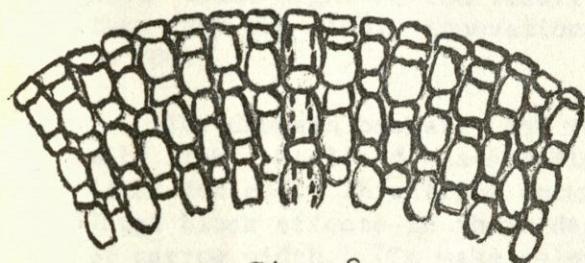
For a straight-sided basket, hold
each succeeding row of reed
exactly over the previous row
(Shape 3).



Activity Frame IX



Step 7



Step 8

To finish the basket, shave off the end of the last length of reed to about one and one-half inches.

Cover this end and the last row of the basket with a simple stitch over and over, sewing into the upper part of the row (coil) beneath. (Step 7)

Finish by working the raffia strand as unobtrusively as possible under and over alternate rows in the direction of the center coil and cut off the end inside. (Step 8)

A simple and excellent way to preserve the finished basket is to rub linseed oil with a soft flat brush, being sure to work the oil into all the crevices, and then rub thoroughly with a brush or soft cloth.

Basket Designs

The designs used by the Chumash in their basketry had many traditional elements which came from explicit rules and standards. The dogmas of shape, design lay-out, and especially space relationships of design elements are very detailed. The design lay-out consisted of a principal band, five or six blocks of alternating black and light checks on the rim (called rim ticks), and the body and zone designs. These were some of the types of design for the body of the basket:

- 1) Ascending diagonals of checks, "butterflies", "lightning" patterns, or step cascades. Diagonals always ascend to the right (seen on the good face) and often have appended "quail plum" elements on the corners.
- 2) Vertical spokes or staff designs, often with serrated margins and appended "quail plumes", sometimes filled with concentric rectangles or triangular elements.
- 3) Coverall checkers or step cascades, completely fill the body zone and often the space above the principal band.

The finished disk is shown in the
 view of the last part of the
 work and the finished disk is

shown in the view of the last part of
 the work and the finished disk is
 shown in the view of the last part of
 the work and the finished disk is

shown in the view of the last part of
 the work and the finished disk is
 shown in the view of the last part of
 the work and the finished disk is

shown in the view of the last part of
 the work and the finished disk is
 shown in the view of the last part of
 the work and the finished disk is

The design was made by the artist and
 the design was made by the artist and
 the design was made by the artist and
 the design was made by the artist and

The design was made by the artist and
 the design was made by the artist and
 the design was made by the artist and
 the design was made by the artist and

The design was made by the artist and
 the design was made by the artist and
 the design was made by the artist and
 the design was made by the artist and

- 4) Tiered horizontal bands, usually narrower than the principal band so as not to compete with it.
- 5) Scattered small black elements, usually a design for humble baskets.
- 6) Crossing diagonals forming a network of design. The usual elements in this layout are square or rectangular in outline with lines joining the corners.

There were also often sections in the design lay out called fillers which could be in the body zone, above the principal band, or in both areas. (Naturally there have been some Chumash baskets found that do not follow the design rules; for instance they might have extra principal bands or none at all. These might be the result of bad workmanship but it is more likely that they are simply innovations.) (Dawson and Deetz, op. cit., pages 204 to 206).

The Chumash basketry had two general color modes: a dark background with light out-lined black designs and a light background with black out-lined designs. This tribe seems to have disliked solid masses of color and large block effects in their designs so they generally used lines and checks of narrow width. (To make colored designs on a first basket use clear tube paints which are pressed on a palette then rubbed on the basket over the linseed oil. The color should not be too thick, or it will not sink into the reed and raffia. For best results, experiment first with the paints on some scrap reed and raffia.) In addition to color design decoration, the Chumash sometimes used beads on the rims and in rows on the baskets. (Refer to the following page.)

Basket Features Similar to Neighboring Tribes

Because there was some inter-tribal exchange of baskets as trade items, the vessels of tribes to the east and south of the Chumash contained similar features in designs and techniques. The following is a list of features shared by the Chumash and neighboring tribes (Ibid., page 206).

With the Eastern Neighbors

- Bucket shaped boiling baskets.
- Flat topped coiled hats.
- Blocks of ticks on the rim (coiled baskets).
- "Quail plume" elements on vertical staff and cascade designs.
- "Butterfly" design.
- "Fly" design.
- "Water skater" design.
- Narrow "lightning" design.
- Fag ends of stitches trimmed close on work face.

With the Southern Neighbors

- Twined basins of whole Juncus rushes.
- Globular trinket baskets; the southern ones bulge more at the base.
- Coiled bucket shaped burden baskets.

...not so complete with the principal band

...usually a design for human bodies.

...The usual elements in layout and design are contained in lines joining

...the body of the design, or in both cases. ...the body of the design, or in both cases. ...the body of the design, or in both cases.

...a dark background ...a light background with black over- ...a light background with black over- ...a light background with black over-

...the design of the

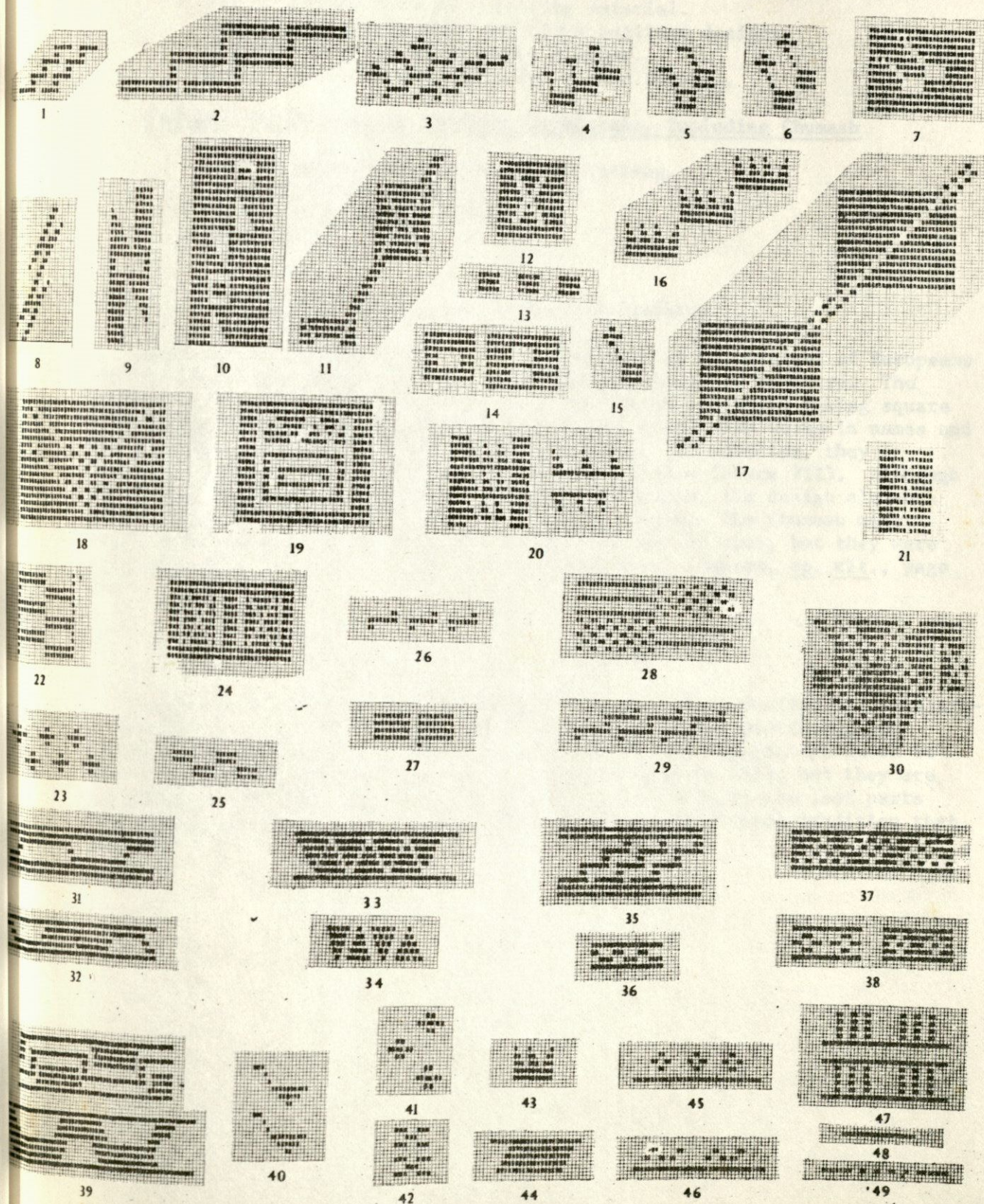
...the design of the ...the design of the ...the design of the

...the design of the

...the design of the ...the design of the ...the design of the

...the design of the

...the design of the ...the design of the ...the design of the



Globular coiled storage baskets.
 3-rod Juncus coil foundation (a few among Gabrielino, Alliklik).
 Use of Juncus rush as a coiling material.
 Dark Juncus background and light outlined designs.
 Coverall cascade and checker designs.
 Use of old coiled baskets for mortar hoppers.

Features Widespread in Southern California, Including Chumash

Left to right work direction in coiling.
 Non-interlocking stitch.
 Flat coiled parching trays.
 Coiled hats.

European Influence on Chumash Basketry

When native culture patterns were disrupted by the arrival of Europeans there were great changes in their traditional systems of basketry. The Chumash worked European ideas into their artifacts and began making square sewing baskets (Plate VI), sombreros, and gift items with woven-in names and inscriptions (such as the Spanish coat of arms). In addition, they frequently added European-style bases to bowl shapes (Plate VII). Although the basket forms were affected by European influence, the design elements and lay-out were generally resistant to such change. The Chumash might weave inscriptions and designs of the Spanish coat of arms, but they were still faithful to their native design principles. (Dawson, op. cit., page 208)

Decline of Chumash Basketry

It is most likely that basket production was stopped after the secularization of the Missions in 1834, probably because of the scattering and continued decrease of the Chumash population. A few baskets are known to have been made after this time, perhaps one as late as 1913, but they are generally poor amateurish works of women who knew only of the last parts of a dying culture and not of the rich and important Chumash tradition that had once existed.

Use of old coiled baskets for mortar hoppers.
 Covertail cascade and checker designs.
 Dark juncous background and light outlined designs.
 Use of juncous rush as a coiling material.
 3-rod juncous coil foundation (a few among Gabrielino, Aiklik).

Features Widespread in Southern California, Including Chumash

Coiled hats.
 Flat coiled patching trays.
 Non-interlocking stitch.
 Left to right work direction in coiling.

European Influence on Chumash Basketry

When native culture patterns were disrupted by the arrival of Europeans there were great changes in their traditional systems of basketry. The Chumash worked European ideas into their artifacts and began making square sewing baskets (Plate VI), sombreroes, and gift items with woven-in names and inscriptions (such as the Spanish coat of arms). In addition, they frequently added European-style bases to bowl shapes (Plate VII). Although the basket forms were affected by European influence, the design elements and lay-out were generally resistant to such change. The Chumash might weave inscriptions and designs of the Spanish coat of arms, but they were still faithful to their native design principles. (Lawson, op. cit., page 108)

Decline of Chumash Basketry

It is most likely that basket production was stopped after the secularization of the Missions in 1834, probably because of the scattering and continued decrease of the Chumash population. A few baskets are known to have been made after this time, perhaps one as late as 1913, but they are generally poor amateurish works of women who knew only of the last parts of a dying culture and not of the rich and important Chumash tradition that had once existed.

II. PLANK CANOES

One of the most unique achievements of the Chumash Indians (in addition to their basketry) was the well-formed plank canoe. This type of canoe was used in no other area of North America except the section of the Santa Barbara coast which extends from Santa Monica Bay (Malibu Canyon) northward to Point Conception and on the outlying islands.

The canoes were constructed of wooden planks which were lashed together by threading with very strong sinew through holes drilled near the edge of each plank. These boards were either of pine, cedar, fir, redwood, or juniper and were generally of a rather small size, probably about three feet long and six inches wide. The bottom board, a thick plank with drilled holes, formed the base. After the planks were sewn together, the canoes were calked with great quantities of asphaltum as a waterproofing. (Robert Heizer, Ethnological Studies, VII, page 210.)

As a final touch to their construction, the launches were painted red with hematite (an iron ore occurring in a variety of forms including a fine-grained earthy type which is soft enough for use as paint pigment) and some of them were decorated with shells. David Banks Rogers mentions in his 1929 archaeological research paper on the Santa Barbara region that some of the Chumash boats contained painted geometric designs in black, white, red, and yellow colors on the exterior of the boat. (Ibid., page 204.)

The size of the canoes varied from twelve to twenty-five feet in length. There were usually three or four men riding in them, although the average canoe could carry twelve people and a larger one could sometimes hold up to twenty Indians. (Campbell Grant, Rock Paintings of the Chumash, page 52.) Both the largest and the smallest of the canoes were constructed so well that the Indians were able to propel them with extreme swiftness by using double-bladed paddles which were about half the length of the canoe. (Heizer, op. cit., page 200.)

The boats were usually quite fragile and light (two men could carry an average-sized one), but were effectively used by the Chumash for one of their main food-producing occupations: fishing. The Indians often hunted sea mammals such as the sea otter, various kinds of seal, the sea lion, and possibly some porpoise, with the help of harpoons which were hurled from the canoes. The abundance of fish in the kelp beds along the Santa Barbara Channel and the coastal islands and the general calmness of the sea in this area provided additional incentives for the Chumash people's use of these canoes. The Indians were able to catch a variety of fish such as ocean whitefish, rockfish, sea perch, halibut, queenfish, sole, sheepshead, bass, tuna, sardines, and mackerel. (Leif Landberg, The Chumash Indians of Southern California, pages 59 and 70.)

There was probably about one canoe per house with an average household of ten to fifteen people. It is presumed that there was a head man in each house who was rich by Indian standards. He maintained authority because of this possessed or inherited wealth. He also owned the house's canoe, as



A rectangular library stamp from the University of California Library of Theology. The text "LIBRARY OF" is at the top, and "OF CALIFORNIA" is at the bottom. In the center, the words "THEOLOGY" and "UNIVERSITY" are arranged in a grid-like pattern.

The logo of the University of California Library, featuring a stylized grid pattern with the words "CALIFORNIA" and "THE LIBRARY" integrated into the design.



LIBRARY
C

the Spanish Father Pedro Font seems to indicate in a passage from his 1776 diary: "When it arrived at the shore ten or twelve men approached the launch, took it on their shoulders still loaded with the fish, and carried it to the house of the master or captain of the launch, distinguished by the bear skin cape." (Heizer, *op. cit.*, page 212.) The "captain's" different dress from the other villagers serves to reinforce the idea that he owned the house, the canoe, and the fish caught in this boat by reason of his wealth and authority. At the same time, everything that he owned was used for the good of the whole household. (*Ibid.*, page 213.)

A very interesting account of these Chumash plank canoes was given by Sebastián Vizcaíno in his 1602 diary. He noted at Santa Catalina island: "canoes of cedar and pine, made of planks very well joined and calked, each one with eight oars and fourteen or fifteen Indians . . . who . . . came on board our ships, mooring their own." He also says:

" . . . a canoe came out to us with two Indian fishermen who had a great quantity of fish, rowing so swiftly that they seemed to fly. . . . After they had gone five Indians came out in another canoe, so well constructed and built that since Noah's ark a finer and lighter vessel with timbers better made has not been seen. Four men rowed, with an old man in the center, singing as in a *mitote* of the Indians of New Spain and the others responding to him." Fr. Antonio de la Ascensión's account of the Vizcaino voyage contains interesting data on the canoe. He says (pp. 349-50), "The day before these had been fishing in some small well made canoes of boards fastened together, with their poops and bows like barks. Some of these canoes were so large that they would hold more than twenty people. In the small ones there are ordinarily three when they go fishing, two men with their paddles and two-bladed oars, seated or on their knees, one in the stern and the other in the bow, and a boy between to throw out such water as the canoe might make. They paddle on one side of the other in such unison and concert that they go flying." Torquemada and Salmeron, both writing of the Vizcaíno expedition, give essentially the same information as Ascensión. (*Ibid.*, page 195.)

Just as the creation of baskets will enable the girl students to become personally involved with the craftwork of the Chumash Indians, so too will the boy students derive such involvement by the construction of miniature plank canoes. While the girls are making their baskets, the boys can be building models of the Chumash canoe through the use of tongue depressors, sewing needles, thread, glue, and paint.

Imitating the shape of the canoe from a drawing (Refer to page 41), the boys should glue the tongue depressors (which have previously been punctured at each end with small holes) in the desired form. The thread is then sewn through the holes of the connected "boards," after which a section of a depressor is glued inside as a sitting platform. Perhaps the use of glue can be considered somewhat of a cheat since the Indians were unable to employ such a material. On the other hand, it is quite possible that the construction of these models would prove to be rather difficult without the use of this technique. The final step of this project is the painting of the models with red paint, and perhaps an addition of some geometric designs, in black, white, and yellow paint.

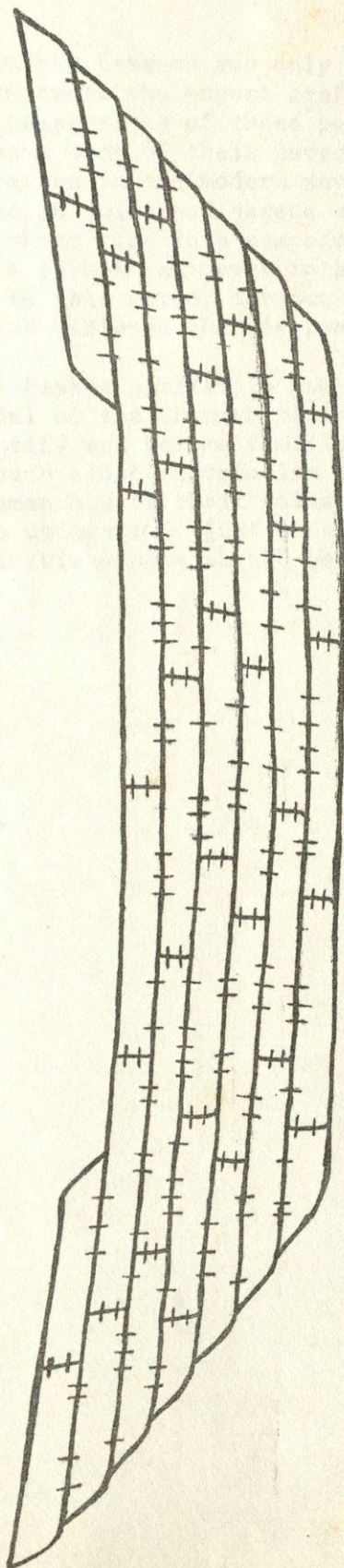


Fig. 4. Reconstruction of the plank canoe of the Santa Barbara channel region. (Heizer, Ethnological Studies, VII, page 211).

CALIFORNIA
THE LIBRARY
OF CALIFORNIA
LIBRARY OF
CALIFORNIA
LIBRARY OF
CALIFORNIA
THE LIBRARY
CALIFORNIA
THE LIBRARY
LIBRARY OF
OF CALIFORNIA
LIBRARY OF
OF CALIFORNIA
CALIFORNIA

THE UNIVERSITY OF CALIFORNIA
LIBRARY
1911

III. CONCLUSION

Less than two hundred baskets and only scraps of former plank canoes have survived to demonstrate the expert craftsmanship of the Chumash Indians. Just as the physical possessions of these people have almost entirely disappeared, so too have many of their personal values and feelings about life been nearly submerged in the modern way of living. It is very seldom that a person can live in quiet and serene surroundings, or that one is able to spend even a short time in a peaceful area where one is truly close to nature. In fact, a person can never totally escape the ambitious drive and continuous haste in this world, nor can he ever forget all of the incessant brutality and violence that is present almost everywhere.

The weaving of a basket similar to one of the Chumash vessels, or the construction of a model of the Chumash plank canoe provide a concrete method for a student to identify and become familiar with the heritage of these people. Perhaps by such close association and by studying the relationship of the Chumash craftsmanship to their values and total way of living, students can begin to understand (just as every person should) how important such simple, yet admirable ethics should be in our life and world today.

THE LIBRARY OF THE UNIVERSITY OF CALIFORNIA

THE LIBRARY OF THE UNIVERSITY OF CALIFORNIA

THE LIBRARY OF THE UNIVERSITY OF CALIFORNIA

THE LIBRARY OF THE UNIVERSITY OF CALIFORNIA

THE LIBRARY OF THE UNIVERSITY OF CALIFORNIA

THE LIBRARY OF THE UNIVERSITY OF CALIFORNIA

THE LIBRARY OF THE UNIVERSITY OF CALIFORNIA

THE LIBRARY OF THE UNIVERSITY OF CALIFORNIA

Visual Aids for the Curriculum

- A. Exhibit E70: "Mortar and Pestle"
 Santa Barbara County Schools
 Educational Service Center
 Audio-Visual Library
 4400 Cathedral Oaks Road, S. Bar.
 964-4711

- B. Films
 1. Film M635: "Indians of California: Village Life"
 Santa Barbara County Schools
 Educational Service Center
 Audio-Visual Library

 2. There is a very interesting film depicting the Chumash method of grinding acorns into meal with the aid of a mortar, pestle, and baskets. The film effectively portrays the simplicity and serenity of the Indian life as opposed to the mechanism and acceleration of life today.
 Contact Jack Stuster (Anthropology Graduate Student) through the UCSB Anthropology Department for information on the film.

- C. Museums: A trip to the museum could perhaps be one of the final steps in this curriculum. While observing the Chumash baskets, the students could be asked to compare their finished products to the original Indian baskets which are displayed. A suggested question would be to ask the children if the Indians can actually be considered "savages" when one witnesses the skill and simple beauty of their crafts, and especially after viewing some modern art.
 1. The Santa Barbara Museum of Natural History has an interesting exhibit showing many aspects of the Chumash Indians, including some of their baskets and a model of a plank canoe.

 2. The Santa Barbara Historical Society Museum provides an excellent tour of their museum with considerable emphasis on the Chumash Indians. The tour is usually in the morning from 9:30 to 12:00 and includes a slide lecture and a visit to the site of El Cuartel and the diggings of the old Presidio.
 Santa Barbara Historical Society Museum
 136 East De La Guerra
 For tour appointments call: 966-1601

- D. Fiction Books: If the students should wish to read stories relating to the Chumash, these are some interesting fiction stories:
 1. Hal Borland, When the Legends Die, Philadelphia and New York, J. B. Lippincott Co., 1963.
 This is a story about a Ute Indian boy rather than the Chumash, but

Exhibit E70: "Mortar and Pestle"
Santa Barbara County Schools
Educational Service Center
Audio-Visual Library
4400 Cathedral Oaks Road, S. Bar.
944-4711

1. Film M635: "Indians of California: Village Life"
Santa Barbara County Schools
Educational Service Center
Audio-Visual Library

2. There is a very interesting film depicting the Chumash method of grinding acorns into meal with the aid of a mortar, pestle, and basket. The film effectively portrays the simplicity and serenity of the Indian life as opposed to the modernism and acceleration of life today.

Contact Jack Stueber (Anthropology Graduate Student) through the USBA Anthropology Department for information on the film.

3. Museum: A trip to the museum could perhaps be one of the final steps in this curriculum. While observing the Chumash baskets, the students could be asked to compare them to the original Indian baskets which are displayed. A suggested question would be to ask the children if the Indians can actually be considered "savages" when one witnesses the skill and simple beauty of their crafts, and especially after viewing some modern art.

4. The Santa Barbara Museum of Natural History has an interesting exhibit showing many aspects of the Chumash Indians, including some of their baskets and a model of a plank house.

5. The Santa Barbara Historical Society Museum provides an excellent tour of their museum with considerable emphasis on the Chumash Indians. The tour is usually in the evening from 9:30 to 11:00 and includes a slide lecture and a visit to the grave of El Capitán and the diggings of the old presidio.

Santa Barbara Historical Society Museum
110 East De la Guerra
For tour appointments call: 944-1991

6. Fiction books: If the students should wish to read stories relating to the Chumash, these are some interesting fiction stories:

1. Hal Borland, When the Legends Die, Philadelphia and New York, J. B. Lippincott Co., 1962.
This is a story about a San Indian boy rather than the Chumash, but

it is a fascinating story and contains some ideas which are relevant to the Chumash ideas and way of life.

2. Gale Ewell, Chumash Indians, San Francisco, Harr, Wagner Publishing Co., 1929.
3. Elsa Falk, Tohi, A Chumash Indian Boy, Los Angeles, Melmont Publishers, Inc., 1959.
4. Scott O'Dell, Island of the Blue Dolphins, Boston, Houghton Mifflin Co., 1960.
5. Rambeau, Hohn and Nancy, and Richard Gross, Chumash Boy, San Francisco, Field Educational Publications, 1968.

ALBETHUNA

2	6
3	5

ALBETHUNA

A rectangular library stamp from the University of California Library of Theology. The text "UNIVERSITY OF CALIFORNIA" is at the top, "LIBRARY OF THEOLOGY" is at the bottom, and "JAN 1968" is in the center.

A rectangular library stamp from the University of California. The text "UNIVERSITY OF CALIFORNIA" is arranged around the perimeter. In the center, the word "LIBRARY" is printed above a large, stylized graphic element that resembles a grid or a stylized letter 'C' with internal lines.

The logo of the University of California, featuring a stylized 'U' and 'C' within a grid, with the words 'UNIVERSITY OF CALIFORNIA' and 'THE LIBRARY' printed vertically on either side.

A rectangular library stamp from the University of Chicago. The text "UNIVERSITY OF CHICAGO" is arranged in a grid pattern within the stamp.

LIBRARY OF
UNIVERSITY OF
CALIFORNIA

CALIFORNIA	
2	00
3	5

BASKETRY ILLUSTRATIONS

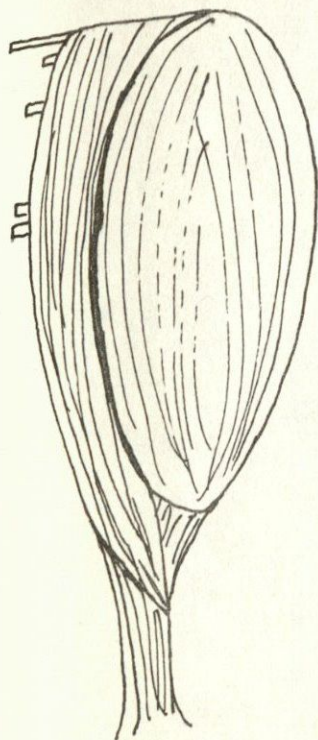


PLATE I

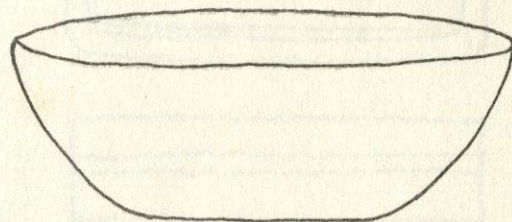


PLATE II

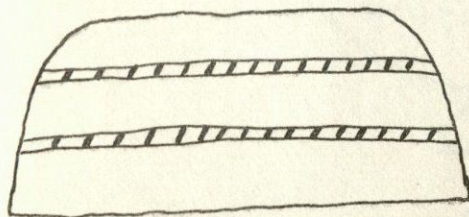


PLATE III

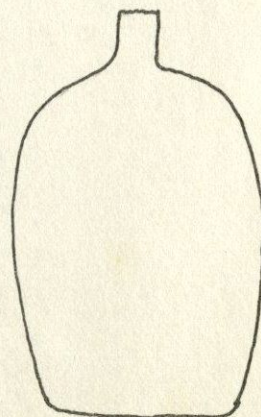


PLATE IV



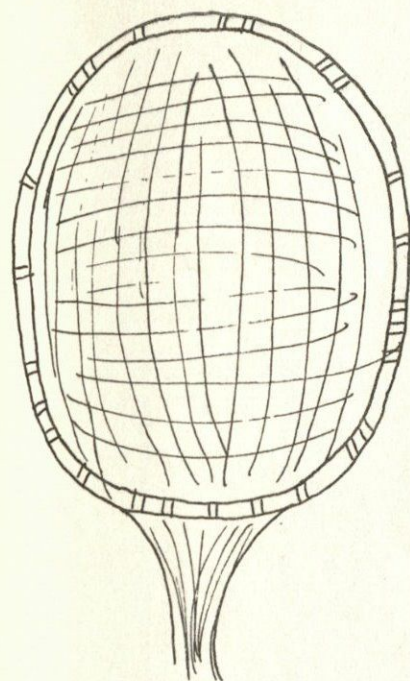


PLATE V

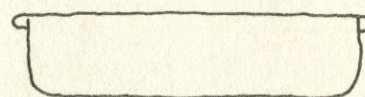
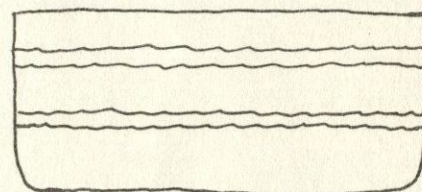
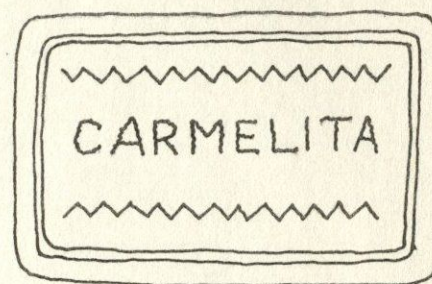


PLATE VI

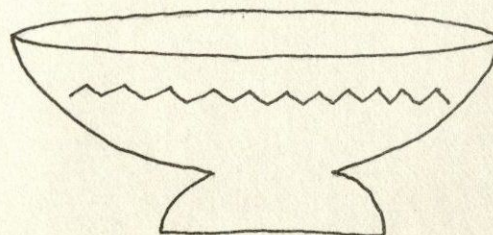


PLATE VII